

# **STATEMENT OF WORK**

**FEDERAL AVIATION ADMINISTRATION  
MIKE MONRONEY AERONAUTICAL CENTER  
AVIATION SYSTEMS STANDARDS (AVN)**

**ENGINE MAINTENANCE SUPPORT  
for  
Pratt & Whitney (P&W) R-1830-94  
Twin Wasp Radial Piston Engines**

**June 2, 2009**

## STATEMENT OF WORK

### ENGINE MAINTENANCE SUPPORT for FAA-Owned Pratt & Whitney (P&W) R-1830-94 Twin Wasp Radial Piston Engines

#### 1.1 INTRODUCTION

The Federal Aviation Administration has a continuing requirement for engine maintenance of two (2) FAA-owned Pratt Whitney (P&W) R-1830-94 Twin Wasp Radial Piston engines consisting of overhaul/repair in support of the FAA's DC-3 (registered as N34) operating in various locations throughout the world.

#### 1.2. BACKGROUND

The FAA maintains and operates one DC-3 aircraft. Currently, the principal mission of this aircraft is to help celebrate the 50<sup>th</sup> anniversary of the creation of the FAA. The engines associated with this SOW are the engines on that DC-3.

#### 1.3. SCOPE

The objective of this requirement is to acquire support to overhaul or repair the two FAA-owned Pratt Whitney (P&W) R-1830-92 Twin Wasp Piston Engines under a time-and-materials arrangement. Preventative maintenance of engines will be performed by FAA personnel or by third party contractors.

#### 1.4. DEFINITIONS

(a) Airworthiness Directive (AD) - An AD is issued by the Federal Aviation Administration in response to a safety-of-flight problem occurring in-service for a specific type of aircraft. It is a mandatory directive for commercial aircraft, which specifies the conditions and limitations, if any, under which the aircraft type may continue to be operated. The AD carries a compliance date plus flight hours and/or cycles that must be complied with to maintain the FAA Airworthiness Certificate (AC).

(b) Bench Stock - Expendable items, which are not requisitioned on an individual basis, but are bought in bulk when a reorder level is reached.

(c) Calibration - A comparison between two instruments, one of which is a standard of known accuracy, to detect and correlate, or adjust, any variation in the accuracy of the instrument being compared.

(d) Component - A separate identifiable part of an end item which performs a function within the system or subsystem necessary for the proper operation of that end item.

(e) RESERVED.

(f) Contracting Officer's Technical Representative (COTR) - the Contracting Officer may designate other Government personnel to act as his or her authorized representative for contract administration functions which do not involve changes to the scope, price, schedule, or terms and conditions of the contract. The designation will be in writing, signed

by the Contracting Officer, and will set forth the authorities and limitations of the representative(s) under the contract. Such designation will not contain authority to sign contractual documents, order contract changes, modify contract terms, or create any commitment or liability on the part of the Government different from that set forth in the contract.

(g) Engine Accessories - a mechanism or device employed to facilitate or increase the effective use of the engine. Attachment 2, Appendix B, exhibits the engine accessories covered (Section B, Item 1.0 & 2.0) when maintenance is performed at the contractor's facility.

(h) Overhaul - The disassembly, cleaning, inspection, repair, rework, replacement of parts or components, reassemble and test of any item or accessory in accordance with applicable technical manuals, directives, or authorized manufacturer's publications to provide an operationally safe, serviceable, and reliable item.

(i) Repair - the restoration or replacement of parts, components, or material as necessitated by wear and tear, damage, or failure of parts, or the like, in order to maintain the specific item or material in efficient operating condition.

(j) Repairable - an unserviceable item that can be repaired and restored to a serviceable condition.

(k) Replace - the replacement of items that are determined to be beyond economical repair (IAW FAR 43).

(l) Scheduled Maintenance - that maintenance which is deemed necessary to be accomplished at prescribed intervals.

(m) Service Bulletin (SB) - a document issued to all customers recommending an inspection and possible repair to the engine. SBs can carry a recommended time compliance by the manufacturer.

(n) Serviceable - capable of meeting the requirement and performing the function for which designed or modified, and meets all test requirements established by the work specification.

## **1.5 SERVICE BULLETINS**

The repair facility shall incorporate all engine and accessory service bulletins in accordance with the following schedule:

(a) Recommended Service Bulletins (SBs). Recommended SBs shall be performed concurrently with other work under the P/H rate as approved by the FAA.

(b) Optional Service Bulletins. Compliance is at the FAA's discretion. The cost of parts and additional labor are chargeable to Section B, (Item to be determined). Upon receipt of a request for estimate from the COTR, the contractor is responsible for preparing and providing a cost estimate for the additional labor and parts required incorporating the optional SB in relation to the prescribed standard hours. The FAA will elect whether to enter into negotiations for the incorporation of the SB based on this cost estimate and other factors and, if so, will authorize performance after negotiations.

## **1.6 CONTRACTOR QUALIFICATIONS**

(a) All work performed under this requirement shall be performed by Federal Aviation Administration (FAA) approved repair station certificate holders that, at a minimum, hold the following ratings or limited ratings:

Power plant Class 3 or Limited Rating for Pratt & Whitney R-1830-92 Twin Wasp Piston Engines shall be performed only by repair facilities holding FAA approved repair station certificates for those engine types.)

(b) Under those ratings listed above, the repair station certificate holder shall possess and maintain operations specification certification that authorizes the contractor to perform the following functions:

(1) Overhaul and internal repair of the P&W R-1830-92 Twin Wasp Piston Engines.

(2) Overhaul and repair of basic engine accessories.

(c) The repair facility may subcontract other functions not authorized by their operations specification certification to include:

(1) Repair and coating of internal engine components such as the vane ring, ducts and liners.

(2) Repair and overhaul of other engine accessories not identified above.

Should a vendor who is not a certificated repair station perform these subcontract functions, the repair facility must have a documented system in place to determine the airworthiness of the article by either inspection or test.

(d) Prior to award of a contract, the FAA will audit the repair facility, at their facility, to ensure these quality standards are available. The repair facility shall be subject to routine periodic audits throughout the term of the contract to ensure these quality standards are maintained and adhered to.

(e) The contractor shall comply with FAR, the FAA General Maintenance Manual, the manufacturers' specifications, recommendations, and repair instructions.

(f) Engine maintenance shall be performed at one location for each engine type except for the subcontracted functions cited in subparagraph (c) above.

## **1.7 CONTRACTOR REMOVAL OF ENGINES**

(a) The contractor must be able to, within 48 hours of being notified, send a repair team to any one of the locations identified below. The team will either do maintenance or minor repair of one or both engines on site, or if needed, remove and transport the engine(s) back to the contractor's facility for major repair or overhaul. Repair/overhaul should be on a priority basis, to aid in returning N34 to service as quickly as possible. Once repaired, the engine(s) will be transported back to N34, installed, and the aircraft will be returned to service. Should repairs/overhaul take beyond two weeks to complete then the FAA is willing to discuss the use of an airworthy rental engine from the contractor until the FAA's engine(s) can be repaired/overhauled and returned to service.

(b) Currently N34 is scheduled to appear at the following locations during 2009: Oklahoma City OK, Oshkosh WI, Lakeland FL, Robins AFB GA, Branson MO, Columbia MO, Jefferson City TX, Manitowoc WI, Ada OK, Mountain Home AR, Dayton OH, Ypsilanti MI, Kansas City KS, Offutt AFB, NE, Tulsa, OK, Scott AFB IL, Alva OK, Sherman/Dennison TX, Sheppard AFB, TX, Slidell LA, Fort Worth TX, Norman OK, Houston TX, Fairview OK, or any other designated airport within an 800 Nautical Mile radius of Will Rogers International Airport, Oklahoma City, Oklahoma.

## 1.9. DELIVERABLES

(a) The contractor shall certify to the FAA, with supporting documentation, that each engine and accessory overhaul, repair and inspection was accomplished in compliance with the current manufacturers' specifications, manuals, and/or operating specifications in accordance with FAA instructions. The supporting documentation shall be provided to the COTR at the following intervals:

- (1) immediately following induction of engine
- (2) immediately following completion of initial inspection
- (3) immediately following completion of final inspection

(b) This documentation shall, at a minimum, contain the following information:

(The contractor shall utilize the company's standard format, modifying only as necessary to include elements cited herein which are not otherwise included in the pre-existing format. The COTR shall review and approve the format).

(1) the FAA contract number (DTFAAC-09-D-\_\_\_\_\_), cited in block 2, page 1 of this contract;

(2) Contractor issued work order identifying, by serial number, component being overhauled;

(3) Dimensional check data;

(4) Replacement parts list;

(5) Repair data;

(6) Reassembly/test data;

(7) Rationale for determination of unserviceable condition, including reference to overhaul/repair specifications;

(8) Complete status of life-limited components, as applicable;

(9) Summary of Airworthiness Directive compliance, as applicable;

(10) Summary of Service Bulletin compliance, as applicable;

(11) Documentation supporting any major repair and/or alteration, as applicable;

(12) Maintenance Release returning the engine to service.

This needs to be incorporated into a Contractor Data Requirements List (CDRL-A001)